METHOD AND APPARATUS FOR PRECONDITIONING DATA TO BE TRANSFERRED ON A SWITCHED UNDERLAY NETWORK

ABSTRACT

Data may be preconditioned to be transferred on a switched underlay network to alleviate the data access and transfer rate mismatch, so that large files may be effectively transferred on the network at optical networking speeds. A data meta-manager service may be provided on the network to interface a data source and/or data target to prepare a data file for transmission, such as by dividing a large file into multiple pieces and causing those pieces to be stored on multiple storage subsystems. The file may then be read from the multiple storage subsystems simultaneously and multiplexed onto scheduled resources on the network. This enables the high bandwidth transfer resource to be filled by a data transfer without requiring the storage subsystem to be augmented to output the data at the network transfer rate. The file may be de-multiplexed at the data target to one or more storage subsystems.